CLAIMS

1. A recording medium configured to record the first data in the form of a track consisting of a plurality of pits, the second data by displacing the pits from the track in a direction at right angles to the track, and content data representing the contents of the first data, including identification data that indicates whether the second data is recorded in the medium.

2. The recording medium according to claim 1, wherein the content data includes reproduction-mode identification data showing the modes of reproducing the first data and the second data.

3. The recording medium according to claim 2, wherein the reproduction-mode identification data represents the first reproduction mode in which a signal is reproduced by performing an operation of the first data and the second data, and the second reproduction mode in which the first data or the second data, or both are reproduced.

4. The recording medium according to claim 1, which has a first recording area in which the first data and the second data are to be recorded, and a second recording area from which data is read before from the first recording area and in which the content data is to be recorded.

5. The recording medium according to claim 1, wherein the first data is 16-bit digital audio data modulated in 8-to-14 modulating scheme.

6. The recording medium according to claim 5, wherein the second data is 4-bit

digital audio data modulated in 8-to-14 modulating scheme and the first data and the second data form 20-bit audio data.

7. The recording medium according to claim 1, wherein the pits corresponding to the second data are displaced in the direction at right angles to the track, by distances falling within such a range that a laser beam correctly scan the track.

8. A recording medium configured to record the first data in the form of a track consisting of a plurality of pits, the second data by deforming the pits, and content data representing the contents of the first data, including identification data that indicates whether the second data is recorded in the medium.

9. The recording medium according to claim 8, wherein the content data includes reproduction-mode identification data showing the modes of reproducing the first data and the second data.

10. The recording medium according to claim 9, wherein the reproduction-mode identification data represents the first reproduction mode in which a signal is reproduced by performing an operation of the first data and the second data, and the second reproduction mode in which the first data or the second data, or both are reproduced.

11. The recording medium according to claim 8, which has a first recording area in which the first data and the second data are to be recorded, and a second recording area from which data is read before from the first recording area and in which the content data is to be recorded.

12. The recording medium according to claim 8, wherein the first data is 16-bit digital audio data modulated in 8-to-14 modulating scheme.

13. The recording medium according to claim 12, wherein the second data is 4-bit digital audio data modulated in 8-to-14 modulating scheme and the first data and the second data form 20-bit audio data.

14. A method of reproducing data from a recording medium in which the first data or the second data, or both are recorded, and content data representing the contents of the first data is recorded, said first data recorded in the form of a track consisting of a plurality of pits, said second data recorded by displacing the pits from the track in a direction at right angles to the track, and said content data including identification data that indicates that the second data is recorded in the medium and reproduction-mode identification data that represents the mode in which the second data is to be reproduced, said method comprising the steps of:

determining the type of the recording medium from the identification data read from the recording medium; and

reproducing the first data and the second data, both read from the recording medium in accordance with the reproduction-mode identification data, when the second data is found to be recorded in the recording medium.

15. The method of reproducing data from a recording medium, according to claim 14, wherein the reproduction-mode identification data represents the first reproduction mode in which a signal is reproduced by performing an operation of the first data and

the second data, and the second reproduction mode in which the first data or the second data, or both are reproduced.

16. The method of reproducing data from a recording medium, according to claim 15, wherein, when the reproduction-mode identification data represents the first reproduction mode, an operation is performed on two data items obtained by reproducing the first data and the second data, both read from the recording medium, thereby to reproduce data.

17. The method of reproducing data from a recording medium, according to claim 16, wherein, when the reproduction-mode identification data represents the second reproduction mode, either a data item obtained by reproducing the first data or a data item obtained by reproducing the second data is output.

18. The method of reproducing data from a recording medium, according to claim 14, wherein the first data read from the recording medium is reproduced and output when the second data is found not to be recorded in the recording medium.

19. An apparatus for reproducing data from a recording medium in which the first data or the second data, or both are recorded, and content data representing the contents of the first data is recorded, said first data recorded in the form of a track consisting of a plurality of pits, said second data recorded by displacing the pits from the track in a direction at right angles to the track, and said content data including identification data that indicates that the second data is recorded in the medium and reproduction-mode identification data that represents the mode in which the second

data is to be reproduced, said apparatus comprising:

a head section configured to apply a laser beam to the recording medium, thereby to scan the recording medium;

a signal-reproducing section configured to reproduce a signal read from the recording medium by the head section; and

a control section configured to determine the type of the recording medium from the identification data read from the recording medium and to cause the signal-reproducing section to reproduce the first data and the second data, both read from the recording medium, in accordance with the reproduction-mode identification data, when the second data is found to be recorded in the recording medium.

20. The apparatus for reproducing data, according to claim 19, wherein the signal-reproducing section comprises a first signal-processing section configured to perform at least demodulation in a signal output from the head section, a second signal-processing section configured to perform at least demodulation on a component of the signal output from the head section, which corresponds to the displacement of pits from the track in a direction at right angles to the track, and a mixing section configured to mix the data output from the first signal-processing section and the data output from the second signal-processing section.

21. The apparatus for reproducing data, according to claim 20, further comprising a switching circuit which is controlled by the control section, thereby to select the data output from the first signal-processing section or the data output from the mixing

section.

22. The apparatus for reproducing data, according to claim 21, wherein the control section controls the switching circuit to select the data output from the mixing section, when the reproduction-mode identification data read from the recording medium by the head section represents a reproduction mode in which a signal is reproduced by performing an operation of the first data and the second data.

23. The apparatus for reproducing data, according to claim 21, wherein the control section controls the switching circuit to select the data output from the first signal-processing section, when the reproduction-mode identification data read from the recording medium by the head section represents a reproduction mode in which the first data or the second data, or both are reproduced.

24. The apparatus for reproducing data, according to claim 20, further comprising a switching circuit configured to supply or not to supply the second signal-processing section with a component of a signal in accordance with a control signal supplied from the control section, said component of the signal being one which corresponds to the displacement of pits from the track in a direction at right angles to the track.

25. The apparatus for reproducing data, according to claim 19, wherein the control section outputs the data output from the signal-reproducing section and corresponding to the first data read from the recording medium, when the identification data read from the recording medium by the head section indicates that the second data is found not to be recorded in the recording medium.